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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date Submitted: August 27, 2004

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of

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Complete If Known

Application Number	10/725,939
Filing Date	12/03/2003
First Named Inventor	Hua Zhang
Group Art Unit	1702 1763
Examiner Name	Unassigned Culbert
Attorney Docket Number	083847-0231

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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RC	A1	AGARWAL, G., et al., "Dip Pen Nanolithography In Tapping Mode", J. Am. Chem. Soc. vol. 125, pp. 7408-7412 (2003).	
	A2	AGARWAL, G., et al., "Immobilization of Histidine-Tagged Proteins on Nickel by Electrochemical Dip Pen Nanolithography", J. Am. Chem. Soc. vol. 125, pp. 580-583 (2003).	
	A3	ALBRECHT, M., et al., "Recording performance of high-density patterned perpendicular magnetic media", Appl. Phys. Lett., vol. 18, no. 15, p. 2875 (2002).	
	A4	ALI, M. B., et al., "Atomic Force Microscope Tip Nanoprinting of Gold Nanoclusters", Langmuir, vol. 18 pp. 872-876 (2002).	
	A5	BEHL, M., et al., "Towards Plastic Electronics: Patterning Semiconducting Polymers by Nanoimprint Lithography", Adv. Mater, vol. 14, no. 8, p. 588 (2002)	
	A6	BOGOZI, A., et al., "Molecular Adsorption onto Metallic Quantum Wires", J. Am. Chem. Soc., vol. 123, pp. 4585-4590 (2001).	
	A7	BOGUNIA-KUBIK, K., "From molecular biology to nanotechnology and nanomedicine", BioSystems, vol. 65, pp. 123-138 (2002).	
	A8	BRAUN, E., et al., "DNA-templated assembly and electrode attachment of a conducting silver wire", NATURE, vol. 391 p. 775 (1998).	
	A9	CAO, Y., et al., "DNA-Modified Core-Shell Ag/Au Nanoparticles", J. Am. Chem. Soc., vol. 123, pp. 7961-7962 (2001).	
RC	A10	CAO, Y., et al., "Nanoparticles with Raman Spectroscopic Fingerprints for DNA and RNA Detection", Science, vol. 297, pp. 1536 (2002).	

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RC	A11	CARVALHO, A., et al., "Self-Assembled Monolayers of Eicosanethiol on Palladium and Their Use in Microcontact Printing", <i>Langmuir</i> , vol. 18, pp. 2406-2412 (2002).		
	A12	CHEN, J., et al., "Large On-Off Ratios and Negative Differential Resistance in a Molecular Electronic Device", <i>Science</i> , vol. 286, p. 1550 (1999)		
	A13	Cheung, C., et al., "Fabrication of Assembled Virus Nanostructures on Templates of Chemoselective Linkers Formed by Scanning Probe Nanolithography", <i>J. Am. Chem. Soc.</i> , vol. 125, pp. 6848-6849 (2003).		
	A14	DEMERS, L. M., et al., "Direct Patterning of Modified Oligonucleotides on Metals and Insulators by Dip-Pen Nanolithography", <i>Science</i> , vol. 296, pp. 1836-1838, (2002).		
	A15	DEMERS, L. M., et al., Orthogonal Assembly of Nanoparticle Building Blocks on Dip-Pen Nanolithographically Generated Templates of DNA", <i>Angew. Chem. Int. Ed.</i> , vol. 40, p. 3071 (2001).		
	A16	DOMINGUEZ-QUINTERO, O., et al., "Silica-supported palladium nanoparticles show remarkable hydrogenation catalytic activity", <i>J. Molecular Catalysis A: Chemical</i> , vol. 197, pp. 185-191 (2003).		
	A17	DONHAUSER, Z. J., et al., "Conductance Switching in Single Molecules Through Conformational Changes", <i>Science</i> , vol. 292 p. 2303 (2001).		
	A18	ELGHANIAN, R., et al., "Selective Colorimetric Detection of Polynucleotides Based on the Distance-Dependent Optical Properties of Gold Nanoparticles", <i>Science</i> , vol. 277, p. 1078 (1997).		
	A19	FÉLIDJ, N., et al., "Controlling the optical response of regular arrays of gold particles for surface-enhanced Raman scattering", <i>Phys. Rev. B</i> , vol. 65, p. 075419-1 (2002).		
	A20	GEARHEART, L. A., et al., "Oligonucleotide Adsorption to Gold Nanoparticles: A Surface-Enhanced Raman Spectroscopy Study of Intrinsically Bent DNA", <i>J. Phys. Chem. B</i> , vol. 105, pp. 12609-12615 (2001).		
	A21	GEISLER, M., et al., "Defect-Tolerant and Directional Wet-Etch Systems for Using Monolayers as Resists", <i>Langmuir</i> , vol. 18, pp. 2374-2377 (2002).		
	A22	GILLEN, G., et al., "Molecular Imaging Secondary Ion Mass Spectrometry for the Characterization of Patterned Self-Assembled Monolayers on Silver and Gold", <i>Anal. Chem.</i> , vol. 66, pp. 2170-2174 (1994).		
	A23	HAES, A. J., et al., "ANanoscale Optical Biosensor: Sensitivity and Selectivity of an Approach Based on the Localized Surface Plasmon Resonance Spectroscopy of Triangular Silver Nanoparticles", <i>J. Am. Chem. Soc.</i> , vol. 124, pp. 10596-10604 (2002).		
	A24	HAYNES, C. L., et al., "Nanosphere Lithography: A Versatile Nanofabrication Tool for Studies of Size-Dependent Nanoparticle Optics", <i>J. Phys. Chem. B</i> , vol. 105, pp. 5599-5611 (2001).		
	A25	HE., H. X., et al., "Electrochemical Fabrication of atomically thin metallic wire and electrodes separated with molecular-scale gaps", <i>J. of Elec. Chem.</i> , vol. 522 pp. 167-172 (2002).		
	A26	HE., H. X., et al., "Fabrication of Designed Architectures of Au Nanoparticles on Solid Substrate with Printed Self-Assembled Monolayers as Templates", <i>Langmuir</i> , vol. 16, pp. 3846-3851 (2000).		
	A27	HE, H. et al., "A Conducting Polymer Nanojunction Switch", <i>J. Am. Chem. Soc.</i> , vol. 123, p. 7730-7731 (2001).		
	A28	HERNE, T. M., et al., "Characterization of DNA Probes Immobilized on Gold Surfaces", <i>J. Am. Chem. Soc.</i> , vol. 119, pp. 8916-8920 (1997).		
	A29	HONG, S. et al., "A Nanoplotter with Both Parallel and Serial Writing Capabilities", <i>Science</i> , vol. 288, p. 1808 (2000).		
	A30	HONG, S. et al., "Multiple Ink Nanolithography Toward a Multiple-Pen Nano-Plotter", <i>Science</i> , vol. 286, p. 523 (1999).		

Examiner Signature	/Roberts Culbert/	Date Considered	12/02/2006
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RC	A31	HONG, S. et al., "A New Tool for Studying the in Situ Growth Processes for Self-Assembled Monolayers under Ambient Conditions", <i>Langmuir</i> , vol. 15, p. 7897-7900 (1999).	
	A32	HUANG, J., et al., "Photopatterning of Self-Assembled Alkanethiolate Monolayers on Gold: A Simple Monolayer Photoresist Utilizing Aqueous Chemistry", <i>Langmuir</i> , vol. 10, pp. 626-628 (1994).	
	A33	HUANG, J., et al., "Photooxidation of Thiols in Self-Assembled Monolayers on Gold", <i>J. Am. Chem. Soc.</i> , vol. 115, pp. 3342-3343 (1993).	
	A34	HUTT, D. A., "Influence of Adsorbate Ordering on Rates of UV Photooxidation of Self-Assembled Monolayers", <i>J. Phys. Chem.</i> , vol. 100, pp. 6657-6662 (1996).	
	A35	IVANISEVIC, A. et al., "Site-Directed Exchange Studies with Combinatorial Libraries of Nanostructures", <i>J. Am. Chem. Soc.</i> , vol. 124, p. 11997-12001 (2002).	
	A36	JANES, D. B., et al., "Self-Assembled Metal/Molecule/Semiconductor Nanostructures for Electronic Device and Contact Applications", <i>Journal of Electronic Materials</i> , vol. 29, no. 5, p. 565 (2000).	
	A37	JIN, R., et al., "Photoinduced Conversion of Silver Nanospheres to Nanoprisms", <i>Science</i> , vol. 294, p. 1901 (2001).	
	A38	JUNG, H., et al., "Dip-Pen Nanolithography of Reactive Alkoxysilanes on Glass", <i>J. Am. Chem.</i> , vol. 125, pp. 12096-12097 (2003).	
	A39	KRENN, J. R., et al., "Squeezing the Optical Near-Field Zone by Plasmon Coupling of Metallic Nanoparticles", <i>Phys. Rev. Lett.</i> , vol. 82, no. 12, p. 2590 (1999).	
	A40	KUMAR, A., et al., "Patterning Self-Assembled Monolayers: Applications in Materials Science", <i>Langmuir</i> , vol. 10, pp. 1498-1511 (1994).	
	A41	LAIBINIS, P., et al., "ω-Terminated Alkanethiolate Monolayers on Surfaces of Copper, Silver, and Gold Have Similar Wettabilities", <i>J. Am. Chem. Soc.</i> , vol. 116, pp. 1990-1995 (1992).	
	A42	LAIBINIS, P., et al., "Comparison of the Structures and Wetting Properties of Self-Assembled Monolayers of n-Alkanethiols on the Coinage Metal Surfaces, Cu, Ag, Au", <i>J. Am. Chem. Soc.</i> , vol. 113, pp. 7152-7167 (1991).	
	A43	LEE, K., et al., "Protein Nanostructures Formed via Direct-Write Dip-Pen Nanolithography", <i>J. Am. Chem. Soc.</i> , vol. 125, pp. 5588-5589 (2003).	
	A44	LEE, K., et al., "Protein Nanoarrays Generated by Dip-Pen Nanolithography", <i>Science</i> , vol. 295, p. 1702 (2002).	
	A45	LI, X., et al., "Sulfonic Acid-Functionalized Gold Nanoparticles: A Colloid-Bound Catalyst for Soft Lithographic Application on Self-Assembled Monolayers", <i>J. Am. Chem. Soc.</i> , vol. 125, p. 4279-4284 (2003).	
	A46	LI, Y., et al., "Electrochemical AFM 'Dip-Pen' Nanolithography", <i>J. Am. Chem. Soc.</i> , vol. 123, p. 2105-2106 (2001).	
	A47	LI, Z., et al., "Multiple thiol-anchor capped DNA-gold nanoparticle conjugates", <i>Nucleic Acids Research</i> , vol. 30, no. 7, pp. 1558-1562 (2002).	
	A48	LIM AND MIRKIN, "Electrostatically Driven Dip-Pen nanolithography of Conducting Polymers", <i>Adv. Mater.</i> Vol. 4, no. 20, pp. 1474-1477 (Oct. 16, 2002).	
	A49	LIM, J., et al., "Direct-Write Dip-Pen Nanolithography of Proteins on Modified Silicon Oxide Surfaces", <i>Angew. Chem. Int. Ed.</i> , vol. 42, pp. 2309-2312 (2003).	
RC	A50	LIU, G., et al., "Nanofabrication of Self-Assembled Monolayers Using Scanning Probe Lithography", <i>Acc. Chem. Res.</i> Vol. 33, pp. 457-466 (2000).	

Examiner Signature	/Roberts Culbert/	Date Considered	12/02/2006
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RC	A51	LOVE, J. C., et al., "Self-Assembled Monolayers of Alkanethiolates on Palladium Are Good Etch Resists", J. Am. Chem. Soc., vol. 124, no. 8, p. 1576 (2002).	
	A52	LOVE, J. C., et al., "Formation and Structure of Self-Assembled Monolayers of Alkanethiolates of Palladium", J. Am. Chem. Soc., vol. 125, pp. 2597-2609 (2003).	
	A53	MALINSKY, M. D., et al., "Chain Length Dependence and Sensing Capabilities of the Localized Surface Plasmon Resonance of Silver Nanoparticles Chemically Modified with Alkanethiol Self-Assembled Monolayers", J. Am. Chem. Soc., vol. 123, pp. 1471-1482 (2001).	
	A54	MAYNOR, B. W., et al., "Direct-Writing of Polymer Nanostructures: Poly(thiophene) Nanowires on Semiconducting and Insulating Surfaces", J. Am. Chem. Soc., vol. 124, no. 4, p. 522 (2002).	
	A55	MAYNOR, B. W., et al., "Au 'Ink' for AFM 'Dip-Pen' Nanolithography", <i>Langmuir</i> , vol. 17, pp. 2575-2578 (2001).	
	A56	MCKENDRY, R., et al., "Creating Nanoscale Patterns of Dendrimers on Silicon Surfaces with Dip-Pen Nanolithography", <i>Nano Lett.</i> , vol. 2, no. 7, pp. 713-716 (2002).	
	A57	MIRKIN, C. A., et al., "A DNA-based method for rationally assembling nanoparticles into macroscopic materials", <i>Nature</i> , vol. 382, p. 607 (1996).	
	A58	MORPURGO, A. F., et al., "Controlled fabrication of metallic electrodes with atomic separation", <i>Appl. Phys. Lett.</i> , vol. 74, no. 14, p. 2084 (1999).	
	A59	MÜLLER, W. T., et al., "A Strategy for the Chemical Synthesis of Nanostructures", <i>Science</i> , vol. 268, p. 272 (1995).	
	A60	NAM, J., et al., "Bio-Barcodes Based on Oligonucleotide-Modified Nanoparticles", J. Am. Chem. Soc., vol. 124, pp. 3820-3821 (2002).	
	A61	NOY, A. et al., "Fabrication of Luminescent Nanostructures and Polymer Nanowires Using Dip-Pen Nanolithography", <i>Nano Lett.</i> , vol. 2, p. 109-112 (2002).	
	A62	PARK, S., et al., "Array-Based Electrical Detection of DNA with Nanoparticle Probes", <i>Science</i> , vol. 295, p. 1503 (2002).	
	A63	PENA, D. J., et al., "'Dip-Pen' Nanolithography in Registry with Photolithography for Biosensor Development", <i>Langmuir</i> , vol. 19, pp. 9028-9032 (2003).	
	A64	PINER, R. D., et al., "'Dip-Pen' Nanolithography", <i>Science</i> , vol. 283, p. 661 (1999).	
	A65	PORTER, L. A., et al., "Electroless Nanoparticle Film Deposition Compatible with Photolithography, Microcontact Printing, and Dip-Pen Nanolithography Patterning Technologies", <i>Nano Lett.</i> , vol. 2, no. 12, p. 1369-1372 (2002).	
	A66	SÁRKÁNY, A., et al., "Some Features of acetylene and 1,3-butadiene hydrogenation on Ag/SiO ₂ and Ag/TiO ₂ catalysts", <i>Applied Catalysis A: General</i> , vol. 243, pp. 347-355 (2003).	
	A67	SERVICE, R. F., "Biology Offers Nanotech's A Helping Hand", <i>Science</i> , vol. 298, pp. 2322 (2002).	
	A68	STORHOFF, J. J., et al., "One-Pot Colorimetric Differentiation of Polynucleotides with Single Base Imperfections Using Gold Nanoparticle Probes", J. Am. Chem. Soc., vol. 120, Pp. 1959-1964 (1998).	
	A69	SU, M., et al., "Moving beyond Molecules: Patterning Solid-State Features via Dip-Pen Nanolithography with Sol-Based Inks", J. Am. Chem. Soc., vol. 124, no. p. 1560 (2002).	
	A70	TARLOW, M. J., et al., "UV Photopatterning of Alkanethiolate Monolayers Self-Assembled on Gold and Silver", J. Am. Chem. Soc., vol. 115, p. 5305 (1993).	
RC	A71	TATON, T. A., et al., "Scanometric DNA Array Detection with Nanoparticle Probes", <i>Science</i> , vol. 289, p. 1757 (2000).	

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RC	A72	VEZENOV, D. V., et al., "Force Titrations and Ionization State Sensitive Imaging of Functional Groups in Aqueous Solutions by Chemical Force Microscopy", J. Am. Chem. Soc., vol. 119, pp. 2006-2015 (1997).	
	A73	WADU-MESTHRIGE, K., et al., "Immobilization of Proteins on Self-Assembled Monolayers", Scanning, vol. 22, pp. 38-388 (2000).	
	A74	WADU-MESTHRIGE, K., et al., "Fabrication of Nanometer-Sized Protein Patterns Using Atomic Force Microscopy and Selective Immobilization", Biophysical Journal, vol. 80, pp. 1891-1899 (2001).	
	A75	WALLRAFF, G. M., et al., "Lithographic Imaging Techniques for the Formation of Nanoscopic Features", Chem. Rev. vol. 99, pp. 1801-1821 (1999).	
	A76	WANG, X., et al., "Scanning Probe Contact Printing", Langmuir, vol. 19, pp. 8951-8955 (2003).	
	A77	WEINBERGER, D. A. et al., "Combinatorial Generation and Analysis of Nanometer- and Micrometer-Scale Silicon Features via 'Dip-Pen' Nanolithography and Wet Chemical Etching", Adv. Mater., vol. 12, p. 1600 (2000).	
	A78	WILSON, D. L., et al., "Surface organization and nanopatterning of collagen by dip-pen nanolithography", PNAS, vol. 98, no. 24, pp. 13660-13664 (2001).	
	A79	WOLFE, D. B., et al., "Fabrication of palladium-based microelectronic devices by microcontact printing", Appl. Phys. Lett., vol. 80, no. 12, p. 2222 (2002).	
	A80	XIA, Y., et al., "Unconventional Methods for Fabricating and Patterning Nanostructures", Chem. Rev., vol. 99, pp. 1823-1848 (1999).	
	A81	XIA, Y., et al., "Soft Lithography", Agnew. Chem. Int. Ed., vol. 37, pp. 550-575 (1998).	
	A82	XIA, Y., et al., "One-Dimensional Nanostructures: Synthesis, Characterization, and Applications", Adv. Mater., vol. 15, no. 5, p. 353 (2003).	
	A83	XIA, Y., et al., "A Selective Etching Solution for Use with Patterned Self-Assembled Monolayers of Alkanethiolates on Gold", Chem. Mater., vol. 7, pp. 2332-2337 (1995).	
	A84	Yeung, L. K., et al., "Heck Heterocoupling within a Dendritic Nanoreactor", Nano. Lett., vol. 1, no. 1, pp. 14-17 (2001).	
	A85	ZHANG, H., et al., "Fabrication of Sub-50-nm Solid-State Nanostructures on the Basis of Dip-Pen Nanolithography", Nano Lett., vol. 3, no. 1, pp. 43-45 (2003).	
	A86	ZHANG, H., et al., "Dip-Pen Nanolithography-Based Methodology for Preparing Arrays of Nanostructures Functionalized with Oligonucleotides", Adv. Mater., vol. 14, no. 20, p. 1472 (2002).	
RC	A87	ZHANG, Y., et al., "Electrochemical Whittling of Organic Nanostructures", Nano Lett., vol. 2, no. 12, pp. 1389-1392 (2002).	

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